

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of Claims

Applicant respectfully notes that the present application is a national stage application filed under § 371 from PCT/JP03/01591, which was amended by an Article 34 amendment on July 18, 2003. A copy of the Article 34 amendments, containing in particular, amendments to the claims, was filed concurrently with the present application. As noted in the Office Action Summary Sheet, the Examiner stated that only claims 1-6 were currently pending in this application, thus indicating that the Article 34 amendments were not entered or examined by the Examiner. In view of this oversight, Applicant's amendments and arguments to the Office Action dated May 22, 2007, are made in view of the Article 34 amendments. Should the Examiner have any questions or issues concerning Applicant's position with respect to the claims, he is respectfully requested to call the undersigned.

Claim Amendments

Claim 1 was amended by this reply to correct an antecedent basis error and to incorporate the subject matter of claim 2. Claim 2 was thereby cancelled. No new matter has been added by this reply.

Rejection(s) under 35 U.S.C. § 112

Claims 1-6 stand rejected under 35 U.S.C. § 112 ¶ 2, as being indefinite. Claim 1 has been amended by this reply in accordance with the Examiner recommendation. In particular,

claim 1 has been amended to clarify that the adhesive layer is arranging on the first electrode. Thus, withdrawal of this rejection is respectfully requested.

Rejection(s) under 35 U.S.C. § 103

Claims 1, 2, and 6 stand rejected under 35 U.S.C. § 103 (a) as being obvious over JP0930947 ("JP '947") in view of JP07082533 ("JP '533"). Claims 3 and 5 stand rejected under 35 U.S.C. § 103(a) as being obvious over JP '947 and JP '533 in view of U.S. Patent No. 5,384,197 issued to Koyama ("Koyama"). Claim 1 was previously amended by the Article 34 amendment to incorporate the subject matter of claim 3. Further, claim 1 has been amended by this reply to incorporate the subject matter of claim 2. To the extent this rejection still applies to the claims as amended, the rejection is respectfully traversed.

JP '947 discloses a method of producing an electrical device comprising arranging an adhesive layer containing a curable resin and electrically conductive particles on a first electrode of a first object, arranging an adhesive layer on a second electrode of a second object, positioning the first and second electrodes in register with each other, and with the first and second object facing each other, connecting the adhesive layer on the first object to the adhesive layer on the second object, thrusting the first and second objects against each other to interconnect the first and second electrodes via the electrically conductive particles, and allowing the curable resin to be polymerized by heating. However, as pointed out by the Examiner, JP '947 does not teach that the adhesive layer arranged on the first electrode contains an epoxy resin and a first curing agent nor that the adhesive layer arranged on the second curing agent contains a second curing agent. Rather, JP '947 simply indicates that a heat curable resin is appropriate.

JP '533 discloses arranging an adhesive layer containing a heat curable epoxy resin, a first curing agent (silane coupling agent), and electrically conductive particles on a first object to be bonded, arranging an adhesive layer containing a polymerization initiator that is to be reacted with the first curing agent on a second object, thrusting the two objects against each other with the adhesive layers therebetween, and allowing the heat curable epoxy resin to be polymerized by heating. Further, the Examiner cites Koyama as teaching an aluminum alcoholate.

The Applicant respectfully notes that in order to establish a *prima facie* case of obviousness, there must be a suggestion or motivation to combine the referenced teachings and a reasonable expectation of success. *In re Vaeck*, 947 F.2d 488, 493 (Fed. Cir. 1991) “Where claimed subject matter has been rejected as obvious in view of a combination of prior art references, a proper analysis under § 103 requires, *inter alia*, consideration of two factors: (1) whether the prior art would have suggested *to those of ordinary skill in the art* that they should make the claimed composition or device, or carry out the claimed process; and (2) whether the prior art would also have revealed that in so making or carrying out, those of ordinary skill would have a reasonable expectation of success.” *Id.* (emphasis added).

Advantageously, the present invention as claimed uses a silane coupling agent as a curing agent, an epoxy resin which undergoes cationic polymerization by reaction between the silane coupling agent and a metal chelate, such that the adhesive may be cured at lower temperatures and for shorter periods of time than conventional adhesives. Further, by separating the second curing agent from the first curing agent and thermosetting resin, no polymerization reaction of the thermosetting resin occurs before thrusting the first and second objects together for bonding, thus maintaining a longer shelf life for the adhesive. Applicant submits that these

effects cannot be expected from the cited reference, and the present invention could not be readily achieved based on the techniques disclosed in those references, or on the combination of those techniques.

Thus, claim 1 is patentable over JP '947, JP '533, and Koyama. Dependent claims are patentable for at least the same reasons. Accordingly, withdrawal of the rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 17155/003001).

Dated: 8/1/07

Respectfully submitted,

By 

T. Chyau Liang, Ph.D.
Registration No.: 48,885
OSHA · LIANG LLP
1221 McKinney St., Suite 2800
Houston, Texas 77010
(713) 228-8600
(713) 228-8778 (Fax)
Attorney for Applicant

Attachments